

AGC Develops Glass Antenna for All Frequencies in the 5G Sub6 band in Japan

Tokyo, March 11, 2022-AGC (AGC Inc., Headquarters: Tokyo, President: Yoshinori Hirai), a world-leading manufacturer of glass, chemicals and high-tech materials, has announced that it has developed a WAVEATTOCH® glass antenna that is compatible with all frequencies of the 5G Sub6 band allocated to the four Mobile Network Operators (MNOs) in Japan, with the technical cooperation of NTT DOCOMO, INC. ("DOCOMO"; Headquarters, Chiyoda-ku, Tokyo; President and CEO, Motoyuki Ii) and JTOWER Inc. ("JTOWER"; Headquarters, Minato-ku, Tokyo; President, Atsushi Tanaka). This product can be used for "infrastructure-sharing", in which telecom infrastructures are shared among multiple MNOs, and contributes to reducing their capital investment. In addition, since the design does not interfere with the appearance of the building, it is expected to be introduced in locations where consideration for the cityscape is important. Commercial experiments are scheduled to begin this fall with the cooperation of JTOWER, followed by commercial production planned to begin in November 2022.



Installation image of WAVEATTOCH®

**Cables are not represented

Since 5G uses a higher frequency than 4G, the communication area that can be covered by a single base station is smaller, and more base stations are needed to further expand the 5G communication area. However, securing physical locations for new base stations and cityscape restrictions have become issues, and it has been pointed out that "infrastructure-sharing" among multiple MNOs will become increasingly important. *1

The glass antenna WAVEATTOCH® launched in 2020, is the world's first antenna that turns a window into a base station that can be attached to the window (on the interior side) of a building to establish a wireless service area on the exterior side without damaging the cityscape or the aesthetics of the building.



News Release

The newly developed product covers all the frequencies in the 5G Sub6 band allocated to the four domestic MNOs with a single unit and is also more compact than AGC's current model*2. Going forward, AGC aims to sell its products widely to the Japanese MNOs and "infrastructure-sharing" companies.

Under its **AGC** plus **2.0** management policy, the AGC Group is working to create products that add a "plus" by providing safety, security and comfort to society and new value and functions to customers. Going forward, AGC will continue its efforts to contribute to the expansion of 5G communication areas in cooperation with MNOs and local governments that are aiming to develop 5G networks.

< Notes >

*1 Guidelines for the Application of the Telecommunications Business Law and the Radio Law to "Infrastructure-Sharing" in the Mobile Communications Field

https://www.soumu.go.jp/main content/000654880.pdf

(Ministry of Internal Affairs and Communications, November 12, 2019)

< Reference >

■ Specifications of shared glass antenna

Dimensions	550 mm x 250 mm				
Weight	Approx. 1.8 kg				

■ Frequency

	[3.7 GHz band]											[4.5 GH:	z band]	
	NTT DO	сомо	K	DDI	Raku Mob		Sof	tBank		KDDI		NTT DO	сомо	
360	0 MHz	3700 N	ЛHz	3800	MHz	3900	MHz	4000	MHz	4100 M	Hz 45	00 MHz	4600 M	Hz

Source: https://www.soumu.go.jp/main content/000613734.pdf

^{*2} Dimension of the current model: 843 mm x 185 mm